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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,699	12/11/2003	Tomohiro Fukumura	60426-647; 20001P12850US0	8679

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EXAMINER	
LEYKIN, RITA	

ART UNIT	PAPER NUMBER
2837	

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/733,699	FUKUMURA ET AL.	
	Examin r	Art Unit	
	Rita Leykin	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Peri d for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,6,8,13,15,16 and 24-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,6,8,13,15,16 and 24-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/11/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-3, 6, 8, 13, 24-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The above claims are indefinite because applicant is fail to point out in the provided independent claims 1, 24 and 29 any device that is coupled to the motor to move the sliding door and create the slack. Claims do not provide teaching on how door is urged toward closed position. There is no structure on how motor can affect the movement of the sliding door and what is a slack creating means or device that is between the motor and the panel.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3, 6, 8, 13, 15 and 24-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long et al. US #5,396,158.

Long et al. disclose a power vehicle door with reversal control. In Fig. 2 Long et al. show a view of the door operating mechanism including beside the others a cable 72 that extends through the curved forward end 32 of track 30 and coupled to a tension retaining spring 140, that reads on applicant's "varying tension between the motor and the panel", as in claim 15. Reel 84 has a large diameter portion and a small diameter portion with spiral cable grooves. The cable is progressively wound upon spiral grooves of large and small diameter portions of reel. As the door 12 approaches the closed position, the winding of cable 72 on small diameter portion 174 provides a higher force/speed relationship between motor 108 and door 12, that obviously will reduce any slack, as in claims 1, 24 and 29(see column 4, lines 4-53). A position sensor 124, shown in Fig. 2 is provided in standard arrangement, to provide a signal, which can be interpreted to sense the rotational speed or position and direction of the door, (see column 6, lines 10-12).

In Fig. 4 Long et al. show a view of door latch including latch switch 60 and latch hooks 54, 55. The opening and closing of switch 60 caused by latch hooks producing falling and rising edge of voltage, shown in Fig. 7. The latch signal is provided to the processor 205 to indicate when the door is near its closed position. That reads on applicant's "determining that panel in its closed position". From the movement of latch apparatus 36 that activates switch 60 the latch status can be interpreted, (see column 8, lines 23-43).

In Fig.9, a "Timer" routine is executed by digital processor for timing of various functions. The "Timer" routine relates to monitoring the door movement based upon the

output of the position sensor 124. For the engaging the door into fully closed position, and initiation of the open door position see column 3, lines 7-20.

With respect to claims 2, 3, 6, 8, 13 and 16, the door position signal is a measure of the door speed. The motor control voltage is controlled to a control value to establish the door speed at a desirable speed value, (see column 1, lines 41-47). The determined desired speed of the motor is translated into the required motor torque.

With respect to claim to claim 31, in Long et al. controller determines when the door in closed position, that require a higher torque in order to fully close the door to a primary latch position. A door position signal period stall time is determined that is a predetermined function of the controlled value of the motor control voltage so that the stall time is adapted to the motor torque. An obstructive load is indicated when the period of the door position signal exceeds the stall time, (see column 1, lines 40-52).

It would be obvious to one of ordinary skill in the art to consider the next latch hook position as a fully closed position and to urge the door into this position when the previous latch hook is engaged, that will correspond to a fully closed position of the door. It is also obvious to one of ordinary skill in the art to start motor for door opening when the signal that the door is in fully closed position is arrived.

The reason is to automatically open the door, upon condition when the obstructive resistance is encountered.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita Leykin whose telephone number is (571)272-2066. The examiner can normally be reached on Monday-Friday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi can be reached on (571)272-2071. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rita Leykin
Primary Examiner
Art Unit 2837

r.l.